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Teaching courses on space geodesy, astronomy, and natural science conceptions at Kazan federal university

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Abstract

© SGEM2017. All Rights Reserved. The article shows that during teaching courses on space geodesy, astronomy, and natural science conceptions at Kazan Federal University (KFU) all the possible modern technologies are used. The natural science conceptions (NSC) course includes a large part on astronomy. This paper describes the modernization of the educational observational base at KFU. The complex of space geodesy and astronomy teaching and the natural science conceptions course at KFU can be contingently divided into four parts: theoretical, practical, interactive, and video-cognitive part. As to the practical part, here all the known educational approaches are applied. The only thing worth mentioning is that we constantly introduce modern material into the composition of teaching course and try to make classes really interesting going beyond the framework of the academic plan telling students tales about famous astronomers and unusual natural phenomena, providing excerpts from popular-science magazines. As the further analysis shows, all this not only contributes to learning the old material and developing the broad horizons, but it also encourage students to become astronomy enthusiasts. After graduation from college a lot of people decide to teach astronomy at schools with ease, and sometimes even choose astronomy as priority. So, the more such enthusiasts exist, the more modern natural science will enter to lives of people. It should be noted that the existing scientific and technological base center of at Engelhardt Astronomical observatory (EAO) plays an important role in training young specialists and includes a complex of advanced telescopes and satellite geodetic metrology polygon. In the near future the further modernization of EAO telescopes is planned. It will allow young researchers to carry out educational and practical observations on a high technological level and acquaint young researchers with the modern observational equipment.

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Keywords

Astronomy, Space education, Space geodesy

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